

57 Abstract: The invention relates to a method for introducing additives into
5 flowing or fluidised media. The spatially predetermined position of the additives
in the flowing material, also called fluid bed, is obtained by controlling the
pulsating injection. The introduction and exact dosing of additives, that is
hardeners, dyes, gas producers and softener for instance, into a liquid plastic
stream or metal stream (10) for instance or the fluid bed of bulk material, such as
10 powder, granules and pellets, is carried out by means of an injector. The
invention is used in melting units, in hot channel systems, in tools, components
of tools and injection moulding machines, extruder-, injection moulding-,
pelletizing-, burner- and injection arrangements. The nozzle needle (3) of at least
one nozzle (2) respectively is variable and highly precisely moved for the
15 introduction by means of a device and in such a way that additive (17) is dosed
exactly in relation to the volume flow of the medium and that a pulsating stream
(18, 36) is injected into the medium flowing past, by means of at least one well-
aimed nozzle opening (4). The additives are dosed by means of a pressure that
can be adjusted variable, pulse width and pulse frequency. The desired
20 homogenous distribution is obtained by the penetrating injection jet (37) during
compounding for instance.

FIG.: 50